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| 09/898,424 | 07/03/2001 | Donald C. Young | 05331.00002 | 1930 |

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BANNER & WITCOFF, LTD.
TEN SOUTH WACKER DRIVE
SUITE 3000
CHICAGO, IL 60606

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| EXAMINER |
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SAYALA, CHHAYA D

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| ART UNIT | PAPER NUMBER |
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1761

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/898,424

Applicant(s)

YOUNG, DONALD C.

Examiner

C. SAYALA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,8,9,13-16 and 21-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,8,9,13-16 and 21-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) .
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu (US Patent 5865870).

Hsu teaches a combination of ammonium phosphite with ammonium polyphosphate or phosphate. The desired pH range is between 5.0-7.5. See col. 2, line 65 and col. 3, line 4 and claims 1 and 2. The ratio of the compounds is given as ranging from 1:20 to 20:1. The compound(s) is/are the same. The utility is the same. The pH is the same. The amounts are given as a ratio. The amounts claimed herein are in percentages. The burden is therefore being shifted to applicant to show that the percentages of N or P do not fall even within the ratios shown by the references because the Office is not equipped to manufacture the two products and make comparisons percentage amounts. See *In re Swinehart*, 439 F.2d 210, 169 USPQ 226, (CCPA 1971); *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). Since prior art has shown the same materials, combined in the same manner with the same pH and manufactured for the same purpose, fertilizers, and applicant has now added new properties to the claims to distinguish them, properties such as percentage amounts that may or may not fall

within the ratios shown by the reference, that the Office cannot compare or measure, for lack of resources, then these new properties must be inherent.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 8-16, 21-27, 29-30, 32, 34-39, 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (US Patent 5865870) and Taylor (US Patent 5800837).

Hsu's patent is as discussed above. The reference does not teach mixing water into the ammonium salts of phosphorus or phosphoric acids. But 1) it teaches diluting the concentrate that contains the same ammonium salts (claim 4) and 2) teaches adding water to the acids, not the salts, (see examples). It would have been obvious to one of ordinary skill in the art at the time the invention is made to add water to the salts just as the reference teaches adding water to the salts in making the fertilizer solution, because the reference teaches that the acid or its salts are useful as fertilizers for the same purpose. When an ammonium phosphite salt is in a water solution, it will contain ammonia, phosphorus acid and water, as in instant claim 8.

The patent does not teach amounts as claimed. However, since Hsu teaches a mixture of ammonium phosphite and ammonium polyphosphate or phosphate

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also, and the ratio shown therein encompasses those claimed, then per cent amounts of N and P must also be the same or similar, even though the reference does not show such amounts per se. What is important is that Hsu teaches that the combination claimed herein is said to have a synergistic effect on plant growth (col. 7, lines 53-56) and this is motivation enough not only to make such a combination but to optimize within the range shown, as needed. As for the N-P-K values, it is well known that such amounts can be adjusted as required by plants, as different plants have different N-P-K requirements.

With respect to the orthophosphate of claim 10 or 17 or 19, Taylor teaches a mixture of orthophosphoric acid and ammonium phosphite, (see col. 8, lines 20-55), as being beneficial for plant growth response and in controlling fungal disease. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use ammonium salts of the orthophosphoric acid, since ammonia is a good source of necessary nitrogen as a fertilizer component.

5. Claims 28, 33 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu (US Patent 5865870) in view of Sheppardson et al. (US 2002/0129632) and RU 2121990.

Hsu is as discussed above but Hsu does not teach ammonium nitrate. Sheppardson et al teach an aqueous fertilizer suspension which is a mixture of phosphorus acid or salt and phosphoric acid or salt. See claims 8 and 9. The reference also teaches adding ammonium nitrate as a nitrogen source, see claims 13 and 14.

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The RU patent also teaches mixing a phosphorus-containing component as ammonium phosphite and phosphate and ammonium nitrate as a nitrogen containing component. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide ammonium nitrate as a nitrogen source, in the Hsu composition, in addition to a phosphorous source as well.

Response to Amendment

6. Applicant's arguments filed 5/14/03 have been fully considered but they are not persuasive.

At page 9 of the response, applicant claims that the reference shows no examples using ammonium phosphate. However, the reference claims phosphorus acid or its salt and phosphoric acid or its salt, and the reference at col. 2, lines 65-67 and col. 3, line 4, teaches that such salts include ammonium phosphate and ammonium phosphate. The list contains no more than 7 cations and 10 cations, respectively. See claims 1-2, 5 and 7, that all claim phosphorus acid or its salts. Next, applicant states that the Hsu reference does not teach the amounts of N or P in the fertilizer. Hsu teaches ratios and therefore, when the artisan works within such ratios, they will include the same percentage amounts claimed herein. Since the only difference between the reference and claims is this limitation, a limitation that cannot be measured by the Office for lack of resources to manufacture and compare prior art products with those claimed herein, the burden is upon applicant to show that there is a difference that can be patented.

At page 10 of his response, applicant states that Hsu does not disclose or teach a nitrogen containing compound . Hsu does teach a nitrogen-containing compound in teaching an ammonium salt. Furthermore, while applicant agrees that Hsu teaches ammonium phosphite and ammonium phosphate or ammonium polyphosphate, he states that the amounts of N or P are not the same or similar to the claimed composition. Applicant also states that the claimed fertilizer contains a N compound, separate from phosphorus acid. This apparent from claims 28, 33 and 40 and this is met by the applied reference of Sheppardson and the RU patent. In fact the claims positively recite that the nitrogen source is ammonia.

Most of applicant's arguments traversing the rejection are based on Hsu's not showing the same percentage amounts of N and P, but as previously stated, Hsu teaches the same compounds, same pH and same utility. Hsu teaches a ration that includes and describes applicant's percentage. The burden is being shifted to applicant to patentably distinguish this invention over the applied references. The Office is not equipped to manufacture and measure the amounts in percentages of Hsu's products in order to unequivocally determine that Hsu's reference does not teach or even fairly suggest the same thing.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA at Group 1761, telephone number (703) 308-3035.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0661


C. SAYALA
Primary Examiner
Group 1700.